CLAIMS

1. (Original) A method comprising:

communicating between a network troubleshooting center (NTC) and network analyzers (NAs) monitoring respectively corresponding communication lines through which Voice over Internet Protocol (VoIP) data streams are transmitted, to provide quality of service statistics for data streams transmitted through the communication lines and associated with a respective telephone call.

2. (Original) A method as in claim 1, wherein said communicating comprises:

transmitting information indicating a respective telephone number from the NTC to the NAs; and,

after receiving the transmitted information, collecting quality of service data by the NAs for data streams associated with a telephone call having the telephone number as a source or destination and transmitted through the communication lines, and providing quality of service information by the NAs to the NTC based on the collected quality of service data.

3. (Previously presented) A method as in claim 1, wherein the communicating comprises:

transmitting information indicating a respective telephone number from the NTC to the NAs;

after receipt of the transmitted information, monitoring call control information by each NA on the corresponding communication line in accordance with the received information to try to identify a data stream associated with a telephone call having the telephone number as a source or destination;

transmitting, by a first NA of the NAs to identify the data stream, identifying

information of the identified data stream to the NTC; and

after receipt of the transmitted identifying information, communicating between the

NTC and the NAs so that each NA has the identifying information, collects quality of service

data for data streams associated with the telephone call and transmitted through the

communication lines, and provides quality of service information to the NTC based on the

collected quality of service data

4. (Original) A method as in claim 1, wherein the telephone call is based on Session

Initialization Protocol (SIP).

5. (Original) A method as in claim 2, wherein the telephone call is based on Session

Initialization Protocol (SIP).

6. (Original) A method as in claim 3, wherein the telephone call is based on Session

Initialization Protocol (SIP).

7. (Previously presented) A method comprising:

transmitting information indicating a respective telephone number from a network

troubleshooting center (NTC) to network analyzers (NAs) monitoring respectively

corresponding communication lines through which Voice over Internet Protocol (VoIP) data

streams are transmitted;

after receipt of the transmitted information, monitoring call control information by

each NA on the corresponding communication line in accordance with the received

information to try to identify a data stream associated with a telephone call having the

telephone number as a source or destination;

transmitting, by a first NA of the NAs to identify the data stream, identifying

information of the identified data stream to the NTC;

after receipt of the transmitted identifying information, transmitting a message from

the NTC to the NAs to cause the NAs to stop trying to identify a data stream associated with

the telephone call, and providing the identifying information to the NAs; and,

after receipt of the message from the NTC, and in accordance with the identifying

information provided by the received message, collecting quality of service data by the NAs

for data streams associated with the telephone call and transmitted through the

communication lines, and providing quality of service information by the NAs to the NTC

based on the collected quality of service data.

8. (Original) A method as in claim 7, wherein the telephone call is based on Session

Initialization Protocol (SIP).

9. (Original) An apparatus comprising:

network analyzers monitoring respectively corresponding communication lines

through which Voice over Internet Protocol (VoIP) data streams are transmitted; and

a network troubleshooting center (NTC) communicating with the network analyzers

(NAs) to provide quality of service statistics for data streams transmitted through the

communication lines and associated with a respective telephone call.

10. (Original) An apparatus as in claim 9, wherein:

the NTC transmits information indicating a respective telephone number to the NAs; and,

after receiving the transmitted information, the NAs collect quality of service data for data streams associated with a telephone call having the telephone number as a source or destination and transmitted through the communication lines, and provide quality of service information to the NTC based on the collected quality of service data.

11. (Previously presented) An apparatus as in claim 9, wherein:

the NTC transmits information indicating a respective telephone number to the NAs; after receipt of the transmitted information, each NA monitors call control information on the corresponding communication line in accordance with the received information to try to identify a data stream associated with a telephone call having the telephone number as a source or destination;

a first NA of the NAs to identify thr data stream transmits identifying information of the identified data stream to the NTC; and

after receipt of the transmitted identifying information, the NTC communicates with the NAs so that each NA has the identifying information, collects quality of service data for data streams associated with the telephone call and transmitted through the communication lines, and provides quality of service information to the NTC based on the collected quality of service data

12. (Original) A method as in claim 9, wherein the telephone call is based on Session Initialization Protocol (SIP).

13. (Original) A method as in claim 10, wherein the telephone call is based on Session Initialization Protocol (SIP).

14. (Original) A method as in claim 11, wherein the telephone call is based on Session Initialization Protocol (SIP).

15. (Original) An apparatus comprising:

      network analyzers (NAs) monitoring respectively corresponding communication lines through which Voice over Internet Protocol (VoIP) data streams are transmitted;

      a network troubleshooting center (NTC); and

      means for communicating between the NTC and the NAs to provide quality of service statistics for data streams transmitted through the communication lines and associated with a respective telephone call.

16. (Original) An apparatus as in claim 15, wherein the telephone call is based on Session Initialization Protocol (SIP).

17. (Previously presented) An apparatus comprising:

      means for transmitting information indicating a respective telephone number from a network troubleshooting center (NTC) to network analyzers (NAs) monitoring respectively corresponding communication lines through which Voice over Internet Protocol (VoIP) data streams are transmitted;

      means for, after receipt of the transmitted information, monitoring call control information by each NA on the corresponding communication line in accordance with the

received information to try to identify a data stream associated with a telephone call having

the telephone number as a source or destination;

means for transmitting, by a first NA of the NAs to identify the data stream,

identifying information of the identified data stream to the NTC;

means for, after receipt of the transmitted identifying information, transmitting a

message from the NTC to the NAs to cause the Nas to stop trying to identify a data stream

associated with the telephone call, and providing the identifying information to the NAs; and

means for, after receipt of the message from the NTC, and in accordance with the

identifying information provided by the received message, collecting quality of service data

by the NAs for data streams associated with the telephone call and transmitted through the

communication lines, and providing quality of service information by the NAs to the NTC

based on the collected quality of service data.

18. (Original) An apparatus as in claim 17, wherein the telephone call is based on Session

Initialization Protocol (SIP).